00-Course Description, Pacing Guide, Instructional Materials

Content Area: **Mathematics**
Course(s):
Time Period: **Marking Period 1**
Length: **Blocks**
Status: **Published**

Course Description

Credits: 5

Prerequisite: Algebra 2 Honors or Pre-Calculus Honors or 91 in Pre-Calculus CP Grades: 10, 11, 12

The purpose of the course is to introduce students to the major concepts and tools for collecting, analyzing and drawing conclusions from data. The topics covered in this course are divided into four major themes: Exploring Data: Describing patterns and departures from patterns, Sampling and Experimentation: Planning and conducting a study, Anticipating Patterns: Exploring random phenomena using probability and simulation, Statistical Inference: Estimating population parameters and testing hypotheses. Students use graphing calculators and computer technology extensively to organize and analyze data. All students enrolled in Advanced Placement courses are required to take the Advanced Placement Examinations in May (see Policy 2429 & Program of Studies page 5).

Pacing Guide

Pacing Guide

Block	Marking Period 1	Block	Marking Period 2
1	Intro to AP Stats Class, Mixed Practice	1	5.2 Probability Rules
2	Review	2	5.3 Conditional Probability and Independence
3	Test on Ch 1	3	Review
4	2.1 Describing Location in a Distribution	4	Review
5	2.2 Density Curves and Normal Distributions	5	Test on Ch 5
6	Review	6	6.1 Random Variables and Probability Distributions
7	Test on Ch 2	7	6.2 Transforming and Combining Random Variables
8	3.1 Scatterplots and Correlation	8	6.3 Binomial and Geometric Random Variables
9	3.2 Least-Squares Regression	9	Review
10	3.3 Transforming to Achieve Linearity	10	Review
11	Review	11	Test on Ch 6

12	Test on Ch 3	12	7.1 What is a Sampling Distribution?
13	4.1 Sampling and Surveys	13	7.2 Sample Proportions
14	4.1 Sampling and Surveys	14	7.3 Sample Means
15	4.2 Experiments	15	Review
16	4.2 Experiments	16	Test on Ch 7
17	4.3 Using Studies Wisely	17	Cumulative Practice AP Test 2
18	4.3 Using Studies Wisely	18	SAFE DAY- to be used as needed in Semester 1
19	Review	19	SAFE DAY- to be used as needed in Semester 1
20	Test on Ch 4	20	SAFE DAY- to be used as needed in Semester 1
21	Cumulative Practice AP Test 1	21	Review for Midterm Exam
22	5.1 Randomness, Probability, and Simulation	22	Review for Midterm Exam
Block	Marking Period 3	Block	Marking Period 4
1	8.1 Confidence Intervals: The Basics	1	Review
2	8.2 Estimating a Population Proportion	2	Test on Ch 12
3	8.3 Estimating a Difference in Proportions	3	Cumulative AP Test 4
4	Review	4	Assign all AP Practice Exams from Workbook and Define Expectations
5	Test on Ch 8	5	AP Practice Exams and FRAPPY Practice/Grading
6	9.1 Significance Tests: The Basics	6	AP Practice Exams and FRAPPY Practice/Grading
7	9.2 Tests about a Popluation Proportion	7	AP Practice Exams and FRAPPY Practice/Grading
8	9.3 Tests about a Difference in Proportions	8	AP Practice Exams and FRAPPY Practice/Grading
	Review	9	AP Practice Exams and FRAPPY Practice/Grading
	Test on Ch 9	10	AP Practice Exams and FRAPPY Practice/Grading
	10.1 Estimating a Population Mean	11	AP Practice Exams and FRAPPY Practice/Grading
12	10.2 Estimating a Difference in Means	12	AP Practice Exams and FRAPPY Practice/Grading
13	Review	13	Estimated Exam Date
14	Test on Ch. 10	14	Letter to a Future AP Stats Student
	11.1 Tests about a Population Mean	15	Reflect on the Exam
16	11.2 Tests about a Difference in Means	16	Review Released FRQ
17	Review	17	Projects using our Stats Skills
18	Test on Ch. 11	18	Projects using our Stats Skills

19	Cumulative AP Practice Test 3	19	Projects using our Stats Skills
20	12.1 Chi-Square Tests for Goodness of Fit	20	Projects using our Stats Skills
21	12.2 Inference for Two-Way Tables	21	Presentations
22	12.3 Inference for Slope	22	Presentations/Class Wrap Up

Core Instructional & Supplemental Materials including various levels of Texts

The Practice of Statistics, 6th Edition and accompanying materials